

REMARKS/ARGUMENTS

Claims 1 – 39 are currently pending and rejected.

Please add new claims 47 – 71.

The applicants cancel claims 10, 11, 23, 25, 29, 30, 34, 35, 37 – 46; amend claims 1 – 9, 15 – 18, 20, 21, 24, 27, 28, 31 – 33 and 36; and add new claims 47 – 71. The applicants do not disclaim the subject matter recited in the cancelled claims, and reserve the right to prosecute the cancelled claims in the future. The applicants respectfully assert that claims 1 – 9, 12 – 22, 24, 26 – 28, 31 – 33 and 36; as amended, and new claims 47 – 71 are in condition for allowance for at least the reasons discussed below.

Rejection against Claims 1 – 39 under 35 USC §112, second paragraph

The applicants have amended the claims to more clearly recite aspects of the invention.

Rejection against Claims 1 – 7

The applicants respectfully assert that claim 1, as amended, is patentable over U.S. Patent 4,526,179 (Salesky) at least because Salesky fails to disclose a processor that demodulates a modified voltage signal to isolate the modified voltage signal from electrical noise generated by the dental instrument.

Salesky appears to disclose a device that determines the proximity of a dental instrument that is located in a tooth to the apical foramen of the tooth. The device appears to do this by comparing the frequencies of two signals. One of the signals appears to travel from the dental instrument to a lead coupled to a patient's lip, and thus through the tooth's apical foramen. The other signal is a reference signal whose frequency is noted as the signal travels through the portion of the path traveled by the first signal that does not include the tooth's apical foramen. To accomplish this, it appears that the lead for the reference signal is placed at the gingival sulcus or periodontal membrane. When the frequency of the signal that travels through the apical foramen matches the frequency of the reference signal,

the instrument is very close to the apical foramen. When Salesky's device compares the two frequencies, the device does not demodulate the signal that travels through the apical foramen. Therefore, unlike the applicants apparatus, Salesky's device does not demodulate the signal that travels from the dental instrument to the lead coupled to the patient's lip.

Claims 2 – 7, as amended, and claims 47 – 52 are patentable at least by virtue of their dependencies on claim 1, as amended.

Conclusion

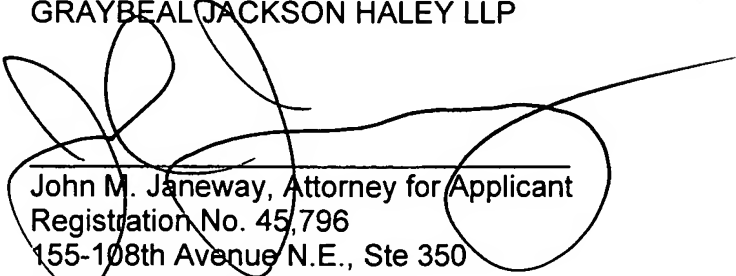
The applicants respectfully request that the examiner withdraw the rejection against claims 1 – 9, 12 – 22, 24, 26 – 28, 31 – 33 and 36, and issue an allowance for claims 1 – 9, 12 – 22, 24, 26 – 28, 31 – 33 and 36, as amended, and new claims 47 – 71.

If, after considering this response, the examiner believes the claims should not be allowed, the applicants respectfully request that before issuing an Office Action, the examiner call the applicants' attorney, Mr. Janeway (425-455- 5575), to schedule a telephone conference to further the prosecution of the claims.

The Commissioner is hereby authorized to charge, at any time during the pendency of this application, any required fees or credit any overpayment to Deposit Account 07-1897 pursuant to 37 C.F.R. §1.25.

Dated this 24th day of January 2008.

Respectfully submitted,
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